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## CLAIMS

## What is claimed is:

- A method for identifying a compound affecting the MAPK pathway comprising the steps of:
- a) providing a cell stably transfected with a recombinant construct, said recombinant construct comprising a polynucleotide encoding a reporter gene, wherein said reporter gene operatively linked to the c-fos promoter;
  - b) contacting said cell with a compound; and
  - detecting a change in expression of said reporter gene;
     whereby a compound affecting the MAPK pathway is identified by detecting the
  - change in expression of said reporter gene under control of the c-fos promoter.
  - 2. A method of claim 1, wherein said reporter gene is the luciferase gene.
  - 3. A method of claim 1 or 2, wherein said compound inhibits the MAPK pathway.
  - 4. A method of claim 1 or 2, wherein said compound activates the MAPK pathway.
- 15 5. A method of claim 3, wherein said cell constitutively expresses low levels of invasion-associated genes, whereby stimulation of said invasion-associated genes occurs via activation of the MAPK pathway.
  - A method of claim 4, wherein said cell constitutively expresses low levels of invasion-associated genes, whereby stimulation of said invasion-associated genes occurs via activation of the MAPK pathway.
  - A method of claim 3, wherein said cell is weakly tumorigenic, whereby c-ets-1 mRNA expression is activated exclusively via the MAPK pathway in said cell.
  - A method of claim 4, wherein said cell is weakly tumorigenic, whereby c-ets-1 mRNA
    expression is activated exclusively via the MAPK pathway in said cell.
- A method of claim 3, wherein said cell is a SNB-19 glioma cell.

- 10. A method of claim 4, wherein said cell is a SNB-19 glioma cell.
- A method of claim 1, wherein the change in expression of said reporter gene is detected as a change in said reporter gene mRNA expression.
- 12. A method of claim 1, wherein the change in expression of said reporter gene isdetected as a change in said reporter gene protein expression.
  - 13. A method of claim 1, wherein the change in expression of said reporter gene is detected as a change in said reporter gene enzyme activity.
  - 14. The method of claim 1, wherein the time course of the change in expression of said reporter gene corresponds to the time course of a change in c-fos gene expression.
  - 15. The method of claim 1, wherein said recombinant construct further comprises at least a portion of the c-fos 3'-untranslated region sequence downstream of said reporter gene sufficient to cause the change in reporter gene expression to correspond to the change in the expression of c-fos.
- 16. A cell comprising a recombinant construct responsive to modulators of the MAPK pathway, wherein said recombinant construct comprises a polynucleotide encoding a reporter gene operatively linked to the c-fos promoter.
  - 17. A cell of claim 16, wherein said reporter gene is the luciferase gene.
  - A cell of claim 16 or 17, wherein said recombinant construct is responsive to inhibitors of the MAPK pathway.
- 20 19. A cell of claim 16 or 17, wherein said recombinant construct is responsive to activators of the MAPK pathway.
  - 20. A cell of claim 16 or 17, wherein said cell constitutively expresses low levels of invasion-associated genes, whereby stimulation of said invasion-associated genes occurs via activation of the MAPK pathway.

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- A cell of claim 16 or 17, wherein said cell is weakly tumorigenic, whereby c-ets-1 mRNA expression is activated exclusively via the MAPK pathway in said cell.
- 22. A cell of claim 16 or 17, wherein said cell is a SNB-19 glioma cell.
- A cell of claim 16 or 17, wherein the time course of a change of expression of said reporter gene corresponds to the time course of a change in c-fos expression.
- 24. A cell of claim 16 or 17, wherein said recombinant construct further comprises at least a portion of the c-fos 3'-untranslated region sequence downstream of said reporter gene sufficient to cause reporter gene expression to correspond to the expression of cfos.